

A Quantum Kinetic Equation for a Plasma in
Consideration of Correlation.

56-7-19/66

compared to the first term.

In the case of shortrange forces and in a domain in which pair interaction suffices, a kinetic equation for the quantum-like distribution function is obtained. This kinetic equation corresponds to the equation for the density matrix which was derived by BOGOLYUBOV and GUROV.

The present paper investigates the first-mentioned equations for F_1 and F_2 only for systems of particles with COULOMB interaction. These equations are specialized here for the following case: The interaction is weak and the correlation radius, which is due to exchange interaction, is smaller than the correlation radius of the COULOMB interaction r_D . The equations derived here at $\hbar \rightarrow 0$ go

over into the equations contained in § 11 of the well-known monograph by BOGOLYUBOV (Problemy dinamicheskoy teorii v statisticheskoy fizike - Problems of Dynamical Theory in Statistical Physics, Gosztekhnizdat, 1946). From the equations derived here the quantum-like kinetic equation for the function $F_1(p; t)$ is obtained by means of a transformation and is written down explicitly. In conclusion some special cases are pointed out in short.

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A Quantum Kinetic Equation for a Plasma in
Consideration of Correlation.

56-7-19/66

(No Illustrations)

ASSOCIATION: Moscow State University.
(Moskovskiy gosudarstvennyy universitet.- Russian)
PRESENTED BY: -
SUBMITTED: 13.12. 1956.
AVAILABLE: Library of Congress.

CARD 3/3

24(5)

AUTHOR: Temko, S.V.

SOV/155-58-2-40/47

TITLE: The Quantum-Kinetic Equation for a Plasma of Several Sorts
(O kvantovom kineticheskem uravnenii dlya mnogosortnoy plazmy)PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskiye nauki,
1958, Nr 2, pp 189-191 (USSR)

ABSTRACT: Usually, in the quantum theory the kinetic equation is constructed for a large number of equal particles moving in the cloud of a uniformly distributed compensating spatial charge. But in general, this description of the stochastic process is only approximative. Therefore the author tries to arrange the quantum-kinetic equation for a system of charged particles consisting of particles of arbitrarily many sorts. He starts from the quantum equation of Temko and Klimontovich [Ref 2] describing the behavior of the single particles in a plasma of several sorts, where only the two-sided correlation in the spatially homogeneous case is considered. Since the integration of the equations obtained herefrom, is not possible, the author gives the following simplifying assumption: for a sufficiently high mean temperature of the plasma the reciprocation of the single particles one to another is small compared with the action of all charged particles

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The Quantum-Kinetic Equation for a Plasma of Several Sorts SOV/155-58-2-40/47

together to the considered plasma particle. Under this assumption, after a convolution transformation and after the decomposition of the Fourier components of the correlation function into Fourier integrals with respect to impulses, an explicit expression for the sought quantum-kinetic equation can be obtained. In the special case there results the equation of Bogolyubov and Gurov [Ref 1]. The author thanks the academician N.N. Bogolyubov.

There are 5 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova
(Moscow State University imeni M.V.Lomonosov)

SUBMITTED: December 30, 1957

Card 2/2

56-2-43/51

AUTHOR: Temko, S. V.

TITLE: On the Quantum-Kinetic Equation for Systems With Several Types of Charged Particles (O kvantovom kineticheskem uravnenii dlya mnogosortnykh sistem zaryazhennykh chastits)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958,
Vol. 34, Nr 2, pp. 523 - 524 (USSR)

ABSTRACT: By means of the method of N. N. Bogolyubov (references 1, 2) a natural generalization of the quantum kinetic equation for the description of the stochastic process in systems with several types of charged particles can be obtained. These particles are supposed to belong to a random number of $M \geq 2$ of various types. If, into the quantum equation for the quantum-like distribution function $F(p; t)$ of any certain particle of the type a in a spatially harmonic case, the solutions of the system of quantum equations are inserted for the quantum functions of the correlation deviation ϵ_{ab} , the quantum kinetic equation for a multitype plasma can be obtained. Because of the difficult determination of the ex-

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On the Quantum-Kinetic Equation for Systems With Several Types of Charged Particles

act solution for the functions ε_{ab} , the problem must be simplified by assuming the exchange interaction and the Coulomb interaction to be small. Also the strength of the reaction of the above-mentioned particle on the reaction of the great majority of particles surrounding this particle has to be considered to be small. The equation resulting on these conditions is given in detail. Then an approximative expression for the screening coefficients in total degeneration is given for a multitype system of many charged particles obeying the Fermi statistics. There are 4 references, all of which are Slavic.

SUBMITTED: November 26, 1957

AVAILABLE: Library of Congress

1. Particles-Systems-Analysis

Card 2/2

SCV/50-35-5-12/56

24(5)
AUTHORS: Klimontovich, Yu. L., Temko, S. V.TITLE: On Equations of Motion of Particle Systems Which Are in
Interaction With Lattice Oscillations (O kineticheskikh
uravneniyakh dlya sistem chastits, vzaimodeystvuyushchikh s
kolebaniyami reshetki)PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol 35, Nr 5, pp 1141-1147 (USSR)

ABSTRACT: The authors of the present paper derive the equations of motion for electrons and crystal lattice oscillators by the method developed by Boclyubov (Refs 1, 2). In connection with the papers by Bardeen, Cooper and Schriffer (Bardin, Kuper, Shrifffer) (Ref 3) and Boclyubov (Ref 4) on superconductivity, an investigation of lattice oscillation of interacting electron systems appears to be of interest. Such an investigation has already been carried out for the spatially homogeneous case (Refs 5, 6); in the homogeneous space the electron distribution function is equal to the equation of motion in Bloch's (Blokh) conductivity theory. The authors of this paper derive a classical approximation for the equation of motion for inhomogeneous electron- and

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On Equations of Motion of Particle Systems Which Are in Interaction With
Lattice Oscillations

oscillator distribution, which has the shape of a Fokker-Planck (Plank) equation in phase space. Also for the corresponding inhomogeneous quantum distribution function an equation of motion is derived. A Hamiltonian is used as a basis which is set up according to Froehlich (Frelikh)(Ref 12) for the electron system interacting with the crystal lattice oscillations. Herefrom a distribution function is derived in the coordinates and momenta of the electrons and oscillators. The system of approximation equations is set up according to Bogolyubov and Gurov (Ref 2), and solutions are derived. It is shown that the general form of the electron distribution function, if a homogeneous distribution of exchange terms is assumed, goes over into terms corresponding to those of Bloch's theory (Refs 9, 11). Also the equation (average) describing the crystal lattice oscillations is written down for the case of homogeneous electron distribution. Expressions have also been derived for the frequency and the damping decrement of oscillations. The authors finally thank Academician N.N. Bogolyubov and D. N. Zubarev for discussing the work. There

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SOV/56-35-5-12/56

On Equations of Motion of Particle Systems Which Are in Interaction With
Lattice Oscillations

are 12 references, 9 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet
(Moscow State University)

SUBMITTED: March 3, 1958 (initially) and July 3, 1958 (after revision)

Card 3/3

TEMKO, S.V., Cand Phys Math Sci -- (diss) "Concerning diffusion
and Brownian motion in plasma and in a spatial crystal lattice."

[Mos], 1959, 8 pp (Mos Order of Lenin and Order of Labor Red

Banner State Univ im M.V. Lomonosov. Phys Faculty) 100 copies

(KL, 36-59, 112)

- 10 -

TEMKO, K.V.; TEMKO, S.V.

The equilibrium potential, Dokl. Akad. Nauk SSSR 166 no. 3 1966 p. 551-554
(MIRA 1981)

1. Submitted May 4, 1965.

UKRAINSKIY, M.A., st. nauchn. sotr.; MASKEVICH, M.M.; LODEYSHCHIKOV, V.V., kand. tekhn. nauk; SKOBELYEV, I.K., prof., doktor tekhn. nauk; STAKHEYEV, I.S., kand. tekhn. nauk; KULIKOV, A.V., kand. tekhn. nauk; KULIKOVA, S.Ya., kand. geol.-miner. nauk; FOKROVSKIY, L.A.; ALEKSANDROVA, N.N.; YELANSKIY, A.N., st. nauchn. sotr.; TROKSKAYA, Z.I.; BANDENOK, L.I., nauchn. sotr.; VERIGO, K.N.; TEMKO, V.P., red.

[Gold mining industry in capitalist countries; technical and economic survey] Zolotodobyvaiushchaya promyshlennost' kapitalisticheskikh stran; tekhniko-ekonomiceskii obzor. Moskva, 1963. 337 p. (MIRA 17:6)

1. TSentral'nyy nauchno-issledovatel'skiy institut informatsii i tekhniko-ekonomic. ikh issledovaniy tsvetnoy metallurgii.
2. TSentral'nyy nauchno-issledovatel'skiy institut informatsii i tekhniko-ekonomiceskikh issledovaniy tsvetnoy metallurgii (for Ukrainskiy, Yelanskiy, Verigo).

TEMKO, V.P., red.; LOGINOVa, Ye.I., tekhn. red.

[The lead and zinc industries of capitalist countries] Svin-tsovo-tsinkovaiia promyshlennost' kapitalisticheskikh stran. Moskva, Pt.1. [Technical and economic survey] Tekhniko-ekonomicheskii obzor. 1962. 65 p. (MIRA 16:4)

1. Moscow. TSentral'nyy institut informatsii tsvetnoy metal-lurgii.
(Zinc industry) (Lead industry)

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

TEMKO, Yuliy Petrovich, dots.; GORBATOVSKIY, I.V., red.; SUBBOTINA,
G.M., tekhn.red.

[Installation of the sanitary-engineering systems of buildings] Montazh sanitarno-tekhnicheskikh sistem zdanii. Novosibirsk, Novosibirskoe knizhnoe izd-vo, 1962. 165 p.

(Sanitary engineering) (MIRA 15:11)

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

TEMKO, Yulij Petrovich; RUFFEL', N.A., nauchn. red.; BEREZOVSKAYA,
A.L., ved. red.

[Plastering] Shtukaturnye raboty. Moskva, Vysshiaia
shkola, 1964. 382 p.
(MIRA 17:9)

TEMKOV, I.; MICHAILOV, S.; BOJKOV, B.

On the protective effect of ceruloplasmin (p-diphenol: O₂-oxidoreductase) in cyanic hypoxia. Dokl. Bolg. akad. nauk 18 no.4:393-396 '65.

1. Submitted on December 18, 1964.

TEMKOV, I.; MICHAILOV, S.

Influence of certain psychotropic drugs on the course of hypoxia induced by potassium cyanide and dipterex. Dokl. Bolg. akad. nauk 18 no.4:397-400 '65.

1. Submitted December 18, 1964.

L 15618-66
ACC NR: AP6008223

SOURCE CODE: BU/0011/65/018/004/0393/0396

AUTHOR: Temkov, I.; Michailov, S.; Bojkov, B.

ORG: Psychiatric Department, Higher Medical Institute, Sofia

TITLE: Protection effect of the ceruloplasmin (p-diphenol-O sub 2-oxydoreductase) during cyanic hypoxias

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 4, 1965, 393-396

TOPIC TAGS: hypoxia, rabbit, cyanide, enzyme, pharmacology, drug effect, antidote, toxicology

ABSTRACT:

The results of the study of the protective role of ceruloplasmin during hypoxia caused by potassium cyanide are presented. Results show beyond doubt that the increased activity of ceruloplasmin in the blood offers a degree of protection against cyanic hypoxia induced in rabbits by absolutely lethal doses of potassium cyanide (5-10 mg/kg). The protective effect following an intravenous introduction of the compound is found only if the increased activity of ceruloplasmin is stable and

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ACC NR: AP6008223

prolonged. Since protective effects due to copper ions are very faint, one is lead to the conclusion that the protective effect of ceruloplasmin is due to the action of the entire molecule of the enzyme and not to the associated copper ions. The paper was submitted by G. Usunoff, Member Bulgarian Academy of Sciences, 18 December 1964. Orig. art. has 3 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 005 / SCV REF: 002

TS
Card 2/2

L 15619-66 EWA(j)/EWA(b)-2 RO
ACC NR: AP6008224

SOURCE CODE: BU/0011/65/018/004/0397/0400

AUTHOR: Temkov, I.; Michailov, S.

ORG: Psychiatric Department, Higher Medical Institute, Sofia

TITLE: Influence of certain psychotropic medications on the evolution of the hypoxia caused by potassium cyanide and by dipterex

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 4, 1965, 397-400

TOPIC TAGS: nervous system drug, drug effect, pharmacology, hypoxia, cyanide, tranquilizer, carbon monoxide, organic phosphorus compound, antidote, experiment animal, toxicology

ABSTRACT:

During earlier studies the authors discovered that chlorpromazine can modify the evolution of hypoxias caused by CO (V"gleokisna intoksikatsiya na nervnata sistema /Carbon Monoxide Intoxication of the Nervous System/, Med. i fizkultura, S., 1962) and cyanic agents (First National Conference on Experimental Medicine, Sofia, 4-7.X 1961, p. 9-10). For want of further information on the subject they carried out further experiments concerning the protective effects of three neuroleptic agents -

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L 15619-66

ACC NR: AP6008224

chlorpromazine (largactil), 4'-fluoro-4-(1-4-hydroxy-4-(4'-chloro)-phenyl-piperidino)-butyrophenon (haloperidol) and thioproperazine (majeptil) against hypoxic states of the nervous system caused by potassium cyanide and the ethyl ester salt of dimethyl-2,2,2-trichloroxyphosphoric acid (dipterox). They describe briefly also the results of the evolution of cyanic hypoxia in conjunction with the psychoanaleptic effect of a monoaminoxidase inhibitor (niamide) and with a psychoenergetic effect due to centrophenoxine. Results show that there exists a protective effect of the neuroleptics due to haloperidol and chlorpromazine. The positive effect appears if

the animals are previously in a state of "optimum catalepsy" and not in an atonic state; likewise, the doses of the poison must not exceed by too much the DL_{50} amounts. The paper was presented by G. Usunoff, Member Bulgarian Academy of Sciences, 18 December 1964. Orig. art. has 5 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 001 / SOV REF: 002

TS
Card 2/2

I. TEPKOV, H. DUDNOV

"First Scientific Session on the condition of Bulgarian medical theory and practice in the light of Pavlov's teaching. p.ll. (ZDRAVNE DELO, No. 1, Jan. 1952, Sofiya, Bulgaria.)

SO: Monthly List of East European Accessions, Vol. 2, No. 7, July 1953, Uncl.

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

TEMKOV, T and GANEV, G.

"Pavlov's Teaching and Marx's Dialectic Method. p. 14" (ZDRANNO DELO) Vol. 6, No. 3
June 1952, Sofiya, Bulgaria.

SO: Monthly List of East European Accessions L.C. Vol. 2, No. 11, Nov. 1953, Uncl.

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

BOZMINOV, Sasho, d-r.; TEMKOV, Ivan, d-r.

Aphasia and apraxia; pathophysiologic analysis. Izv.med.inst.
Sofia 11-12:607-641 1955.

1. Nervno-psihiatricna klinika (dir.:prof. Georgi Usunov) pri
visshtia meditsinski institut V. Chervenkov-Sofia.
(APHASIA, pathology,
physiopathol.)
(APRAXIA, pathology,
physiopathol.)

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

TEMKOV, Iv.; DIMITROV, Khr.; GULUBOVA, M.

Nikola Gavrilov Krustnikov, outstanding Bulgarian psychiatrist.
Suvrem. med., Sofia 7 no.1:109-119 1956.

(BIOGRAPHIES,
Krustnikov, Nikola G. (Bul))

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

TENKOV, Iv.; DITSOVA, A.

Results of the treatment of certain mental diseases with largactil.
Suvrem. med., Sofia 7 no.5:61-68 1956.

1. Iz Katedrata po psikiatriia pri VMI--Sofia. (Zav. katedrata:
prof. G. Uzunov).
(CHLORPROMAZINE, therapeutic use,
ment. disord. (Bul))
(MENTAL DISORDERS, therapy,
chlorpromazine (Bul))

TEMKOV, Iv.; DITSOVA, An.

Some rare complications of the treatment with quartan malaria.
Suvrem. med., Sofia 7 no.10:96-100 1956.

1. Iz Katedrata po psichiatriia pri VMI - Sofia (Zav. katedrata:
prof: G. Uzunov).
(FEVER THERAPY, compl.)

TEMKOV, Iv.; DIMITROV, St.; SHINDAROV, L.

So-called psychogenic encephalitis with report of a case. Suvrem. med.,
Sofia 8 no. 4:49-56 1957.

1. Iz Katedrata po psikiatriia (Zavezhdashch katedrata: prof. G. Uzunov)
Katedrata po detski bolesti (Zavezhdashch katedrata: prof. L. Rachev) i
Republikanskata protivoepidemichna stantsiia (Gl. lekar: L. Shindarov).
(ENCEPHALITIS, case reports,
psychotic acute azotemic (Bul))

TEMKOV, Iv.; KHRISTOVA, L.

Pyrogenic and therapeutic effect of a new Bulgarian vaccine. Suvrem. med.,
Sofia 8 no.5:9-17 1957.

1. Iz katedrata po psichiatriia pri VMI--Sofia (Zav. katedrata: prof.
G. Uzunov)

(ALCALIGENES,

faecalis, prep. of pyrogen used in fever ther. (Bul))

(FEVER THERAPY,

prep. of pyrogen from Alcaligenes faecalis (Bul))

(PYROGENS, preparation of,
from Alcaligenes faecalis, for fever ther. (Bul))

BULG/RLI/Pharmacology and Toxicology. Tranquilizers

V-2

Abs Jour : Ref Zhur - Biol., No 15, 1958, No 71084

Author : Temkov Iv., Boyadzhieva M.
Inst : -

Title : On the Toxic Manifestations During the Use of the Phenothiazine Derivatives

Orig Pub : S"vrem. med., 1957, 8, No 10, 47-55

Abstract : In connection with the cases of the development of hepatitis, as well as of the syndrome of Parkinsonism, under the influence of largactyl [chlorpromazine], the problems of the pathogenesis and pathophysiological changes in the above complications are being discussed. EEG data in extrapyramidal disturbances reveal dynamic disorders of the interaction between cortex and subcortical formations (weakening of the inhibitory and regulating function of the cortex associated with activation of some extrapyramidal mechanisms) which are at the basis of the syndrome of Parkinsonism induced by largactyl.

Card : 1/1

UZUNOV, G.; TEMKOV, I., BOIADZHIEVA, M.

Shizofreniya i epilepsiia. Suvrem. med., Sofia 8 no.11:60-66 1957.

1. Iz Katedrata po psichiatriia pri VMI - Sofiia (Zav. katedrata: prof.
G. Uzunov).
(SCHIZOPHRENIA, differ. diag.
epilepsy (Bul))
(EPILEPSY, differ. diag.
schizophrenia (Bul))

TEMKOV, I. (Sofiya)

Development of psychiatry and psychoneurologic care in Bulgaria.
Zhur.nevr. i psikh. 57 no.1:114-123 '57. (MIRA 10:3)
(PSYCHIATRY
in Bulgaria, review)

TEMKOV, I., ATSEV, E.; DITSOVA, A.; IORDANOV, B.

Effect of largactil on epilepsy; clinical, biochemical and electroencephalographic studies. Suvrem. med., Sofia 9 no.3:3-22 1958.

1. Iz Katedrata po psichiatriia pri VMI--Sofiia (Zab. katedrata; Prof. G. Uaunov)

(EPILEPSY, ther.

chlorpromazine (Bul))

(CHLORPROMAZINE, ther. use

epilepsy (Bul))

TEMKOV, Iv.; ZAIMOVA, N.

Results of treatment of psychoses with serpasil. Suvrem. med., Sofia
9 no.9:29-33 1958.

1. In Katedrata po psichiatriia pri VMI--Sofia (zav. katedra: prof.
G. Uzunov).

(PSYCHOSES, ther.
reserpine (Bul))
(RESERPINE, ther. use
psychoses (Bul))

TEMKOV, IV., ATSEV, Ye., DITSOVA, A., YORDANOV, B.

Effect of largactyl on epilepsy; clinical, biochemical,
and electroencephalographic studies [with summary in French].
Zhur.nevr. i psikh. 58 no.10:1164-1175 '58 (MIRA 11:11)

1. Kafedra psikiatrii (zav. - prof. G.Uzunov) Meditsinskogo
instituta, Sofiya.
(EPILEPSY, ther.
chlorpromazine (Rus))
(CHLORPROMAZINE, ther. use
epilepsy (Rus))

TEMKOV, Iv.; DITSOVA, An.

On clinical aspects of influenzal psychoses. (Observations made during the epidemic of influenza in 1959). Suvrem med., Sofia no.4: 43-50 '60.

L. Iz Katedrata po psikiatriia pri VMI, Sofiia (Rukov. na katedrata: prof. G.Uzunov)

(PSYCHOSES etiol)
(INFLUENZA compl)

TEMKOV, Iv.; IVANOV, Vl.

Basic principles of mental hygiene and prophylaxis. Suvrem med.,
Sofia no.9:124-133 '60.
(MENTAL HYGIENE)

TEMKOV, Iv.; BOIADZHIEVA, M.; SHTEREVA, T.

Changes in the cholinesterase activity of the blood serum in some psychoses under the influence of nivaline. Nauch. tr. vissh. med. inst. Sofia 39 no.6:105-114 '60.

1. Predstavena ot prof. G. Uzunov, rukovoditel na Katedrata po psikhiatriia.

(ALKALOIDS ther) (PARASYMPATHOMIMETICS ther)
(CHOLINESTERASE blood)

BOZHINOV, S.; TEMKOV, Iv.

The role of "dynamic stereotypy" according to I.P. Pavlov's concept in physiopathology of aphasia. Suvr. med. 12 no.10: 79-83 '61.

(CENTRAL NERVOUS SYSTEM)
(REFLEX CONDITIONED)
(APHASIA)

TEMKOV, Iv.; BOIADZHIEVA, M.; ZHABLENSKI, A.

Treatment of some psychoses and neuroses with andaxin. Suvr.
med. 13 no.6:26-31 '62.

1. Iz Katedrata po psichiatriia pri VMI [Vissh meditsinski
institut] - Sofiia (Rukovod. na katedrata akad. G. Uzunov).
(MEPROBAMATE) (PSYCHOSES) (NEUROSES)

1
BULGARIA

I. TEMCOV and Zh. DASKALOV, Department of Psychiatry (Katedra po psichatriya) headed Prof G. UZICKOV, VMT Sofia.

"Haloperidol in the Treatment of Manic States."

Sofia, Byvras na Meditsina, Vol 13, No 12, 1962; pp 31-36.

Abstract [Engl. ab. summary modified]: haloperidol in 16 female and 5 male patients in the manic phase. Generally effect was faster than with chlorpromazine but relapses were correspondingly rapid too. Severe parkinsonian side effect in 8 could be counteracted with triethylenediamine. Some decrease in blood pressure (to 91/65 and 95/74) in 2. Thirty references: 1 Polish, rest Western, mostly Belgian.

1/1

BULGARIA

TEMKOV, Iv., M. BOYADZHIEVA, and A. ZHABLENSKI, Department of Psychiatry (Katedra po Psichiatriya), Higher Medical Institute (Visschi Meditsinski Institut), Sofia.

"Psychiatric Treatment with Centrophenoxin (Lycidryl)."

Sofia, Suvremenna Meditsina, Vol 14, No 3, 1963, pp 39-45.

Abstract: /Authors' Russian summary modified/ The authors report on the treatment of 70 patients (41 in depressive states, 16 with neuroses, and 19 with organic illnesses of the central nervous system) with centrophenoxin (lycidryl, ANP 235). The preparation is more effective with depressive states of organic origin. It favorably affects sleep, vegetative disturbances, and patients' dispositions but does not eliminate conditions. The preparation should therefore be used in depressive states in combination with thymoleptics or in more severe cases with electric shock. In the treatment of neuroses, the 1/2/most favorable effect is achieved on neurasthenia,

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Sofia, Suvremenna Meditsina, Vol 14, No 3, 1963, pp 39-
45 (continued).

especially when vegetosomatic complaints are predominant. There is also a beneficial effect on vegetative syndromes in traumatic brain disease, although the focal manifestations remain unaffected. The effect is also favorable in organic diseases of the central nervous system (brain arteriosclerosis, intoxications, etc.) which occur with dulled consciousness in varying degrees. Faster recovery of consciousness and a reduction in the duration of psychosis were noted in two cases of delirium tremens. The observed no radical side effects or complications. Sixteen Western references of recent date.

2/2

STANILOVA, M.; MEVORAKH, E.; ZAIMOV, K.; TEMKOV, Iv.; SHIPKOVENSKI, N.

Recent comparative investigations on penicillin and malarial therapy of progressive paralysis. Suvr. med. 14 no.5:33-39 '63.

(FEVER THERAPY) (PENICILLIN) (PARESIS)

TEMKOV, Iv.; DITSOVA, A.; MEVORAKH, E.

Possibilities of thiopropazine (Majeptil) therapy of psychoses.
Suvr. med. 14 no.7:22-28 '63.

(THIOPROPERAZINE) (PSYCHOSES)
(PARANOIA) (SCHIZOPHRENIA)

TEMKOV, Iv.; GULUBOVA, M.; DASHINOVA, N.; ATSEV, E.

Clinical and electroencephalographic studies on the therapeutic action of α -ethylsuccinimide and α -methylsuccinimide (Zarontine) in epilepsy (petit mal). Nevropsikh nevrokhir 3 no.1:37-47 '64.

TEMKOV, Iv.; BOIADZHIEVA, M.

A LSD-25 clinico-experimental test as an accessory measure in differential diagnosis of psychosis and simulated mental disorders. Suvr. med. (Sofia) 15 no.9:28-34 '64

UZUNOV, G.; TEMKOVI, I.; ATSEV, E.

Favorable reaction to largactil in diencephalic epilepsy. Suvrem. med.,
Sofia 9 no.8:89-95 1958.

1. Iz katedrata po psichiatriia (Zav. katedrata: prof. G. Uzunov).
(EPILEPSY, etiol. & pathogen.
diencephalic inj., chlorpromazine ther. (Bul))
(DIENCEPHALON, wds. & inj.
causing epilepsy, chlorpromazine ther. (Bul))
(CHLORPROMAZINE, ther. use,
epilepsy in diencephalic inj. (Bul))

TEMLEITNER, J.

Some remarks on mechanized plastering. p. 111. Vol. 4, No. 3, 1955.
MAGYAR EPITOIPAR. Budapest, Hungary.

SOURCE: East European List, (EEAL) Library of Congress Vol. 6, No. 1
January 1956.

GUTOWSKI, B.; TEMLER, A.; BAREJ, W.; KULASEK, G.

Studies on the blood serum in heifers fed fodder with the addition
of urea. Acta physiol.polon. 11 no.5/6:713 '60.

1. Z Katedry Fizjologii Zwierząt S.G.G.W. w Warszawie, Kierownik:
prof.dr B.Gutowski.
(UREA)
(BLOOD chem)

GUTOWSKI, B.; KOZNIEWSKI, S.; TEMLER, A.; BAREJ, W.; KULASEK, G.

Studies on the cecal contents in horses. Acta physiol.polon.
11 no.5/6:714 '60.

1. Z Katedry Fizjologii Zwierząt S.G.G.W. w Warszawie, Kierownik:
prof.dr B.Gutowski.
(CECUM)

GUTOWSKI, Boleslaw; BAREJ, Wieslaw; TEMLER, Anna; NOWOSIELSKA, Irwina

Studies on the content of the rumen in cattle. II. Volatile fatty acids and nitrogen compounds in liquid contents of the rumen and free amino acids in the blood of calves fed green lucerne. Acta physiol.polon. 12 no.1:119-128 Ja-F '60.

1. Z Katedry Fizjologii Zwierząt S.G.O.W. w Warszawie. Kierownik:
prof.dr B. Gutowski.

(STOMACH physiol.)

(FATTY ACIDS)

(NITROGEN)

(AMINO ACIDS blood)

TEMLER, Eliza, inz.

New way of temperature control in thermostats. Chemik 16
no. 4:124-126 Ap '63.

S/274/63/000/001/011/020
D469/D308

AUTHORS: Temler, Jan and Orlewicz, Boleslaw

TITLE: Effects of tolerance limits of heterodyne circuits
in superheterodyne receivers

PERIODICAL: Referativnyy zhurnal, Radiotekhnika i elektronika i elektrosvyaz',
no. 1, 1963, 41, abstract 2B305 (Prace Inst. Tele-
i radiotechn., 1962, v. 6, no. 1, 57-76 (Pol.: sum-
maries in Ang., Rus., Fr. and Ger.))

TEXT: The authors consider the effects of tolerance limits
for elements of heterodynies, when a triple system is used. Formulas
are deduced for the determination of errors resulting from different
elements. Numerical examples are given which explain the influence
of equalizer circuit on the ganging curve of the system. A graph
for approximate determination of the relation between capacitance in
the equalizer circuit and maximum detuning is included.
[Abstracter's note: Complete translation]

Card 1/1

TEMLER, Jan, mgr inz.; ORLEWICZ, Boleslaw, inz.

Influence of circuit stray capacitance on the frequency range
ratio of radio receivers produced in series. Prace inst
teletechn 7 no.4:49-60 '63.

TEMLER, Jan, mgr inz.; ORLEWICZ, Boleslaw

Approximation of the failure curve for some TV sets during the
guarantee period. Prace inst teltechn 8 no.4:113-128 '64.

1. Submitted May 27, 1964.

TENLIK, H.; BAVLÍK, I.

Pulmonary complications after intracranial injuries and their prevention. Rozhl. chir. 44 no.2:93-97 F '65.

I. Vyzkumy ustaty traumatologicky v Evropě (reditele: prof. dr. V. Novák, DrSc.).

KROUPA, J.; TEMLIK, H.

Remarks on first aid and the care of wounds. Rozhl. chir. 44
no.4:217-223 Ap'65.

1. Vyzkumný ustav traumatologicky v Brne (reditel: prof. dr.
V. Novák, DrSc.).

TEMLIK, Herbert

Leukocyte changes after intracranial injuries. Rozhl. chir. 40 no.10:
658-660 0 '61.

1. Vyzkumny ustav traumatologicky v Brno, reditel prof. MUDr. Vladimir
Novak, Dr.Sc.

(BRAIN wds & inj) (LEUKOCYTE COUNT)

KROUPA, J.; TEMLIK, H.; JANIK, B.

Late findings in traumatic fat embolism. Rozh. chir. 43 no.4:
211-220 Ap '64.

1. Vyzkumný ustav traumatologicky v Brně (ředitel prof. dr. Vl.
Novák, DrSc.).

COUNTRY:	: Czechoslovakia
CATEGORY:	: R-13
ABS. JOUR.:	: RZKhim, No. 5 1960, No. 18806
AUTHOR:	: Matousek, J. and Temlik, O.
TIME:	: Not given
TITLE:	: The Automation of Cement Production
ORIG. PUB.:	: Stavivo, 37, No 6, 1959-1960 (1960)
ABSTRACT:	: The author discusses the possibility and desirability of the automation of individual production steps in cement plants. Experience at several plants is analyzed. From author's summary
CARD:	: 1/1

TEMLIK, O.; MATOUSEK, J.

Experiences with vibrative grinding in the cement factory in Hranice. p. 329

STAVIVO. (Ministerstvo stavebnictvi) Praha, Czechoslovakia. Vol. 37, no. 10,
Oct. 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 12, Dec. 1959
Uncl.

TEMLIK, O., inz; VITOVSKY, J.

Measurement of the temperature of material and extraction of
flue gases in rotary kilns. Stavivo 41 no.10:369-373 0 '63.

1. Vyvojove oddeleni HCV, Mranice.

TEMLIK, O., inz.; VITOVSKY, J.

Automatic grinding control in tube mills. Stavivo 41 no.11:
394-395 N'63.

1. Vyvojove oddeleni, Hranicka cementarna, Hranice.

TEMLIK, O., inz.; VITOVSKY, J.

Apparatus for automatic measurement of the fineness of cement.
Stavivo 42 no.11:/03-406 N '64.

1. Development Department of the Hranicka cementarna a vepenice
National Enterprise, Hranice.

Osoboye lineynoye integral'noye uravneniye tipa Volterra. Tomsk, Izv. III matem. i mekh.,
un-ta, 1:1 (1935), 23-33.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushovich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

Горячев, А. С.

Sushchestvovaniye osobykh resheniy nelineynykh integral'nykh uravnenii vida $\xi(x) = \int f(s, \xi(s)) ds$. Tomsk, izv XII matem. i mekh. un-ta, 1:1 (1935), 39-44.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

Zu dem Wachstumsproblem der harmonischen funktionen des dreidimensionalen Raumes. Matem. sb., 42 (1935), 707-718.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

O nelineynom integral'nom uravnenii tipa $\int_a^b f(s) ds = f(x)$. Tomsk, Izv. III matem.
i mekh. un-ta, 2:1 (1938), 83-98.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow-Leningrad, 1948

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

TEMLYAKOV, A.A.

DOC PHYSICOMATH SCI

Dissertation: "Harmonic Functions and Functions of Two Complex Variables with the Analytical Determining Function."

21 Apr. 49

Mathematics Inst imeni V.A. Steklov, Acad Sci USSR

SO Vecheryaya Moskva
Sum 71

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

TEMILYAKOV, A. A.

PA 233T94

USSR/Mathematics - Analytic Extension Nov/Dec 52

"Analytic Extension of Functions of Two Variables,"
A. A. Temlyakov

"Iz Ak Nauk SSSR, Ser Matemat" Vol 16, No 6,
pp 525-536

Introduces the concept of hypercone of convergence $/z_+/^n/v/kR$ of series $F(z,v) = \sum a_{n,m} z^n v^m$ and establishes the criterion sufficient that the hypercone of convergence be a region of regularity or function $F(z,v)$. Submitted by Acad M. V.

233T94

Keldysh 14 Dec 51. The author previously established the integral representation of $F(x,y)$ in the form $F(x,y) = (1/c) \int_0^c f(x+ye^{it}, y-xe^{-it}) dt$, where $c=2\pi$, $ye^{-it}=v$.

233T94

TEMLYAKOV, A.A.

Entire functions of two complex variables. Uch. zap. MOPI
20:7-16 '54. (MIRA 10:7)
(Functions of complex variables)

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

TEMLYAKOV, A.A.

Integral representation of analytic functions of two complex
variables. Uch.zap.MOPI 21:7-22 '54. (MLRA 10:7)
(Functions, Analytic)

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

a certain project of interest.

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

T E M L Y A K O V , A . A .

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.)_{MOSCOW},
Jun-Jul '56, Trudy '56, v. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.
There are 4 references, 2 of which are English, 1 is USSR, and
1 French.

Temlyakov, A. A. (Moscow). Integral Representation of Functions
of Two Complex Variables. 105

Timan, A. F. (Dnepropetrovsk). On a Linear Approximation
Processes of Periodic Function by Trigonometric Polynomials 105-106

Timan, A. F. (Dnepropetrovsk). On Some Problems of the
Constructive Theory of Functions Defined in the Finite
Interval of Real Axis Section. 106

Mention is made of Nikol'skiy, S. M. and Chebyshev, P. L. 106

Trokhimchuk, Yu. Yu. (Novosibirsk). On N. N. Luzin
Problems in the Theory of Functions of a Complex Variable. 106

Tumarkin, G. Ts. (Moscow). On Certain Boundary Properties
of Analytic Function Sequences. Card 33/80 106-107

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

TEMLYAKOV, A.A.

Logarithmic deduction and criterion of univalence. Uch. zap. MOPI
39 no.3:5-13 '56. (MLRA 10:4)
(Functions, Analytic) (Conformal mapping)

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

TEMLYAKOV, A.A.

Integral representation of analytic functions of two complex
variables. Uch. zap. MOPI 39 no.3:15-17 '56. (MLRA 10:4)
(Functions, Analytic)

TEMLYAKOV, A.A.; BAVRIN, I.

Form of a pair of integer functions univalent in a space of two
complex variables. Uch. zap. MOPI 39 no.3:19-21 '56 (MLRA 10:4)
(Spaces, Generalized)

AUTHOR: TEMLYAKOW, A.A. PA - 2365
TITLE: Integral Representation of the Functions of Two Complex
Variables. (Integralnoye predstavlenie funktsiy dwukh kompleksnykh
peremennyykh, Russian).
PERIODICAL: Izvestiia Akad. Nauk, SSSR, Ser. Mat., 1957, Vol 21, Nr 1,
pp 89 - 92 (U.S.S.R.)
Received: 4 / 1957 Reviewed: 5 / 1957
ABSTRACT: In this paper the properties of the functions which are "internally analogous" and are in a doubly-round closed domain are determined. The values of the function $F(w,z)$ in the domain of D are determined from the operator values $L/fF/ = fF + w(fF)'_w + z(fF)_z$ on the boundary of the domain D if the function $F(w,z)$ in this domain is known.
The doubly-round domains of two complex variables are dealt with in this paper. The function $F(w,z)$ which is determined in such a (closed) domain is treated as being taken from the function class of "analogous internally closed domain of D ". The sorted out class of functions is contained in the class of the analogous functions within the closed domain of D and is contained in the class of functions which are analogously in the domain D as also constantly in this closed domain D . This paper determines the properties of the functions of this class. The following conclusion is drawn: If the linear differential operator $L/fF/ =$

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PA - 2365

Integral Representation of the Functions of Two Complex Variables.

- $\phi(w, z)$ on the boundary of the domain D, as well as the function $f(w, z)$ are known, the function $F(w, z)$ is at every point $(w, z) \in D$ determined by the formula

$$f(w, z)F(w, z) = \frac{1}{4\pi^2 \tau} \int_0^{i\tau} dt \int_0^1 d \int_C \frac{\phi[\tau, (\tau) \xi, \tau^2(\tau) \eta]}{\xi - u} d\xi$$

Publications: "Les fonctions de deux variables complexes et problème de la représentation analogique" by H. Cartan)

ASSOCIATION: Not given.
PRESENTED BY/ Member of the Akademy Lawrentiew, M.A.
SUBMITTED: 7.1.1956
AVAILABLE: Library of Congress.

Card 2/2

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

TEMLYAKOV A.A.

Evaluating coefficients. Uch. zap. MOPI 57 no. 4:25-27 '57.
(MIRA 11:6)
(Functions of complex variables)

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

TEMLYAKOV, A.S.

Inequalities for the coefficients of a double power series.
Uch. zap. MOPI 57 no.4:43-44 '57. (MIRA 11:6)
(Inequalities (Mathematics)) (Series)

20-120-5-13,67

AUTOR: Temlyakov, A.A.

TITLE: Integral Representations of Functions of two Complex Variables
(Integral'nyye predstavleniya funktsiy dvukh kompleksnykh peremennnykh)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 120, Nr 5, pp 976-979 (USSR)

ABSTRACT: Let $D \ni (0,0)$ be a domain of the space of two complex variables bounded by the hypersurface

$$|w| = r_1(\tau), \quad |z| = r_2(\tau) \quad 0 \leq \tau \leq 1.$$

where $r_1(\tau)$ is continuous on $[0,1]$ and

$$(1) \quad r_1(0) = 0, \quad 0 < r_1'(\tau) \leq \frac{r_1(\tau)}{\tau}, \quad r_1(1) < \infty, \quad 0 < \tau \leq 1,$$

while

$$(2) \quad r_2(\tau) = \exp \left[- \int_{1-\tau}^{\tau} \frac{1}{1-t} d \ln r_1(t) \right].$$

If $F(w,z)$ is regular in D and continuous in \bar{D} or if $F(w,z)$ is analytic in D and F, F'_w, F'_z are continuous in \bar{D} , then for $F(w,z)$ there hold certain integral representations given in earlier papers of the author [Ref 2-4]. In the present paper the author

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Integral Representations of Functions of two Complex Variables 20-120-5-5/67

investigates which domains correspond to the conditions (1) and (2). It is asserted that the class of domains the boundaries of which are defined by (1) and (2), are identical with the class of two times circular domains the boundaries $\phi_{\rho}(w, \bar{w}, z, \bar{z}) = 0$ of which are two times continuously differentiable and for which the determinant of Levy is positive.

Replacing (1) by $r_1(0) = 0$, $0 < r_1(\tau) \geq \frac{r_1(\tau)}{\tau}$, $r_1(1) < \infty$.

then for the domains D' the same is true but the representations are different from those ones given in [Ref 2-4]. If $F(w, z)$ is regular in D' and continuous in \bar{D}' , then e.g.

$$F(w, z) = \frac{1}{4\pi^2 i} \int_0^{2\pi} dt \int_0^1 d\zeta \int_C \frac{\zeta F r_1(\zeta) \zeta^n, r_2(\zeta) \eta^n}{(\zeta - n)^2} d\zeta,$$

where C is the unit circle of the ζ -plane, $\eta = \zeta e^{-it}$, $u = \zeta \left(\frac{w}{r_1(\zeta)} \right)^{1/r_1}$, $+ (1-\zeta) \left(\frac{z}{r_2(\zeta)} \right)^{1/n} e^{it}$, $n = E \left(\sup_{0 < \zeta < 1} \frac{d \ln r_1(\zeta)}{d \ln \zeta} \right)$.

Card 2/3

Integral Representations of Functions of two Complex Variables 20-120-5-13 67

There are 4 references, 3 of which are Soviet and 1 German.

ASSOCIATION: Moskovskiy oblastnoy pedagogicheskiy institut imeni N.K.Krupskoy
(Pedagogical Institute of the Moscow Oblast imeni N.K.Krupskaya)

PRESENTED: February 11, 1958, by M.A.Lavrent'yev, Academician

SUBMITTED: December 19, 1957

1. Topology 2. Functions 3. Mathematics

Card 3/3

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

TEMLYAKOV, A.A.

Integral representation of functions of two complex variables.
Uch.zap.MOPI 77:3-12 '59 (MIRA 13:5)
(Functions of complex variables)

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6

TEMLYAKOV, A.A.

Boundary value problem for equations with special planes.
Uch.zap.MOPI 77:91-98 '59. (MIRA 13:5)
(Functions of several variables)

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220012-6"

TEMLYAKOV, A.A.

Representations of functions of two complex variables by integrals.
Dokl. AN SSSR 120 no. 5:976-979 Je '58. (MIRA 11:8)

1. Moskovskiy oblastnoy pedagogicheskiy institut im. N.K.Krupskoy.
Predstavлено академиком M.A.Lavrent'yevym.
(Functions of complex variables)
(Integrals)

16(1)

AUTHOR:

Temlyakov, A.A.

SOV/20-124-1-9/69

TITLE:

Integral Representations of Functions of two Complex Variables (Integral'nyye predstavleniya funktsiy dvukh kompleksnykh peremennnykh)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 1, pp 38-41 (USSR)

ABSTRACT: In [Ref 1-3] the author obtained integral representations for functions $F(w, z)$ which are analytic in a double circular domain D and continuous in \bar{D} . In the present paper the same integral representations are given for more general domains D . D is now bounded by the hypersurface $w = r_1(\tau) \zeta$, $z = Z_2(\tau) \gamma$ where :

$$\gamma = \zeta e^{-it}, \quad 0 \leq t \leq 2\pi, \quad 0 < \tilde{\tau} < 1, \quad r_1(0)=0, \quad r_1(1) < \infty,$$

$$r_1'(\tau) > 0, \quad \left(\frac{r_1(\tau)}{\tau} \right)' < 0, \quad \zeta = \varsigma(\varphi) e^{i\varphi},$$

$$r_2(\tau) = \exp \left[- \int_0^\tau \frac{\tau}{1-\tau} d \ln r_1(\tau) \right], \quad \varsigma(\varphi) \text{ is a real, positive,}$$

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Integral Representations of Functions of two
Complex Variables

SOV/20-124-1-9/69

continuous 2π -periodic function. The obtained integral representation says that the values of $F(w, z)$ in D are determined by the behavior of the linear operator $L[F] = F + wF'_w + zF'_z$ on the boundary of \bar{D} .

There are 6 references, 4 of which are Soviet, 1 Italian, and 1 American.

ASSOCIATION: Moskovskiy oblastnoy pedagogicheskiy institut imeni N.K. Krupskoy (Moscow Oblast Pedagogical Institute imeni N.K. Krupskaya)

PRESENTED: August 23, 1958, by M.A. Lavrent'yev, Academician

SUBMITTED: August 20, 1958

Card 2/2

16(1) 16.3000 16,3800

57901

AUTHOR: Temlyakov, A.A.SCOV/20-129-5-6/6⁴TITLE: Integral Representations

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 5, pp 986-988 (USSR)

ABSTRACT: In his earlier publications [Ref 1,2,3] the author obtained integral representations of two kinds for functions $F(w,z)$ analytic in bicircular domains (in later Russian papers they are called integrals of Temlyakov). In the present paper the author communicates that these representations in the simplest case of the hypercone $|w|+|z|\leq 1$ originate from a reversion formula [Ref 4] and from the formula

$$(2) \quad \phi(x,y,z) = \frac{1}{2\pi} \int_0^{2\pi} f(e^{it}, u) dt$$

for the harmonic function $\phi(x,y,z)$, analytic in $(0,0,0)$, ($u = x+i(y \cos t + z \sin t)$). A further step in the construction

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7

Integral Representations

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SOV/20-129-5-6/64

of the above integral representations were certain integrable differential invariants (monoms $w^m z^n$, $m \geq 0$, $n \geq 0$).
The author mentions L.A. Ayzenberg.
There are 7 Soviet references.

ASSOCIATION: Moskovskiy oblastnoy pedagogicheskiy institut imeni N.K. Krupskoy
(Moscow District Pedagogical Institute imeni N.K. Krupskaya)

PRESENTED: July 29, 1959, by M.A. Lavrent'yev, Academician

SUBMITTED: July 24, 1959

X

Card 2/2

31567

16.3200

AUTHOR: Temlyakov, A.A.

TITLE: Integral representations

PERIODICAL: Referativnyy zhurnal. Matematika, no. 1, 1962, 22
abstract 1 B 110. (Uch. zap. Mosk. obl. ped. in-ta, 1960, 96.
3-14)

TEXT: A survey is given of the papers of the author (RZh Mat, 1956, 3784; 1957, 7000, 8587; 1958, 9756; 1960, 5188, 6395) which are dedicated to the integral representations of functions being holomorphic in the bi-circular domains of the space C^2 of the two complex variables w and z . The author corrects an unexactness which he had allowed in the preceding paper (R Zh mat, 1960, 6395), consisting in the statement that there be always $\mu < \infty$. As the author shows there can actually be $\mu = \infty$, e.g. if the domain has the boundary

$$\partial D = \left\{ (w, z) : |w| = \exp \left[- (\tau)^{-1/2} \right], |z| = \left[(1 - \sqrt{\tau})(1 + \sqrt{\tau})^{-1} \right]^{1/2}, 0 \leq \tau \leq 1 \right\}$$

Besides there are given analogous results for the integral representation

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X

Integral representations

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expressing the values of a function $f(w,z)$ holomorphic in D , by the values of the linear operator $L[f(w,z)] = f(w,z) + wf'_w(w,z) + zf'_z(w,z)$ on the boundary ∂D of the domain D , where it is presumed that $F(w,z) = L[f(w,z)]$ is continuous in \bar{D} . (R Zh Mat, 1957, 8587 ; 1958, 9756 ; 1960, 5188, 6395). X

[Abstracter's note : Complete translation.]

Card 2/2

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S/044/62/000/001/013/061
C111/C444

AUTHOR: Temlyakov, A.A.

TITLE: On integrals representations

PERIODICAL: Referativnyy zhurnal. Matematika, no. 1, 1962, 22,
abstract 1 B 111. (Uch. zap. Mosk. obl. ped. in-ta, 1960,
96, 179-182)

TEXT: The sources for the origin of the integral representations for functions being holomorphic in bicircular domains which formerly had been obtained by the author (R Zh Mat, 1956, 3784; 1957, 7006, 8587; 1958, 9756; 1960, 5188, 6395) are given. First of all these integral representations are obtained for the most simple domain $D = \{(w,z) : |w| + |z| < 1\}$ by the inverse formula

$$f(e^{it}, u) = -\phi'(1,0,0) + \int_0^1 \frac{du}{u} \left\{ u \left[\phi(\tau u, -i(1-\tau)u e^{-it}, (1-\tau)u e^{-it}) + \phi(\tau u, -i(1-\tau)u e^{it}, -(1-\tau)u e^{it}) \right] \right\} d\tau$$

of the author, and by the formula of Whittaker

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On integrals representations

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C111/C444

$$\phi(x, y, z) = \frac{1}{2\pi} \int_0^{2\pi} f(e^{it}, u) dt$$

which holds for an (in 0,0,0) analytic harmonic function $\phi(x, y, z)$, where $u = x + i(y \cos t + z \sin t)$.

In the extension of the given integral representations to other bicircular domains one uses the fact that the monomials $w^m z^n$, $m \geq 0$, $n \geq 0$ are invariants of the transformation

$$\frac{1}{2\pi} \int_0^w dt \int_0^1 \frac{du}{du} [u(r_1(\tilde{v})u)^m (r_2(\tilde{v})ue^{-it})^n] d\tilde{v} = w^m z^n$$

where $u = \frac{\tilde{v}}{r_1(\tilde{v})} w + \frac{(1-\tilde{v})e^{it}}{r_2(\tilde{v})} z$, $r_1(\tilde{v})$ and $r_2(\tilde{v})$ are continuous bounded

positive functions in the interval (0,1).

[Abstracter's note : Complete translation.]

Card 2/2